REMARKS

Claims 1-4, 8-9 and 11-26 remain in this application. Claims 5-7 and 10 have been cancelled without prejudice. Claims 21-26 are newly added without entering any new

5   matters.

The Examiner is thanked for the thorough examination of the present application. Claims 1-4, 8-9 and 11-20, however, are rejected under 35 U.S.C. 103(a). Applicant respectfully requests reconsideration of the remaining claims for at least the reasons set

10   forth herein.

Response to the claim rejections:

Claim 1 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Jones

15   (U.S. Patent No. 6,873,279) in view of Kuo (U.S. Patent No. 7,145,968). This rejection is respectfully traversed.

Claim 1 recites "a multilevel quantizer coupled with the equalizer for **selectively utilizing a first amount of one or more thresholds or a second amount of one or more**

20   **thresholds to quantize the equalized signal** in order to generate the sliced signal, wherein **the first amount is different from the second amount**". Jones, however, teaches a distinct method for quantizing a signal based on one or more threshold values, processing the signal to create one or more **updated threshold values**, and quantizing a following signal based on the updated threshold values (Jones: col. 2, lines 17-31; col. 2,

25   lines 32-48; col. 2, lines 49-65; col. 3, lines 18-57; col. 3, line 64 – col. 4, line 18; col. 4, lines 26-42; col. 4, lines 50-56). Jones illustrates the **MIN and MAX values that are used to calculate the threshold, and thus, modification of the MIN and MAX values may alter the threshold value** (Jones: col. 6, line 66 – col. 7, line 1; Figs. 3A and 3B).

Jones further stated: "In general, the MIN values and MAX values may be represented as MIN-N value and the MAX-M values, where N and M represent positive whole numbers. The MIN-N value and the MAX-M values are configured to change over time based on the prior received input signals and existing MIN-N and MAX-M values. In this manner,

5   changes in the input signal that occur over time may be accounted for, and **the threshold value, which is dependent upon the MIN and MAX values, may be dynamically modified to adapt to changes in the input signal**." (Jones: col. 8, lines 9-18; Figs. 3A and 3B). Accordingly, the MIN and MAX values are used to alter the threshold values but themselves are NOT the threshold values. Therefore, Jones at most discloses a method for

10   modifying the threshold value but fails to teach or suggest **selectively utilizing different amounts of thresholds to quantize the equalized signal** as described in claim 1.

Although Kuo discloses a hard decoder comprising an equalizer which receives a digital signal and a threshold to output a "positive", "zero" or "negative" signal (Juo: col. 4, lines 30-35; Fig. 4), Kuo does not compensate for the deficiencies of Jones, i.e.

15   **selectively utilizing different amounts of thresholds to quantize the equalized signal**. Kuo stated: "In Fig. 4, the equalizer 402 quantizes the received digital signal. For example, when the digital signal is smaller than the threshold, the digital signal is quantized to a level of "zero". When the absolute value of the digital signal is larger than "DC+threshold", the digital signal is quantized to the "positive" level. When the absolute

20   value of the digital is smaller than "DC+threshold", the digital signal is quantized to a "negative" level." (Kuo: col. 4, lines 40-47; Fig. 4). Accordingly, Kuo at most discloses an equalizer with multilevel-quantizing function but nowhere teaches or suggests the equalizer **selectively utilizing different amounts of thresholds to quantize the equalized signal**. As a result, Jones in view of Kuo fails to disclose all the limitations of

25   claim 1 and thereby claim 1 should be allowable over Jones in view of Kuo. Since claims 2-4, 8-9, 11, and 21-22 are dependent upon claim 1, if claim 1 is found to be allowable, so too should the dependent claims.

Applicant also asserts that independent claims 12 and 17 are in condition of allowance because of at least the same reasons placing claim 1 allowable. Since claims 13-16, 18-20, 23-26 are respectively dependent upon claims 12 and 17, if claims 12 and 17 are found to be allowable, so too should the dependent claims.
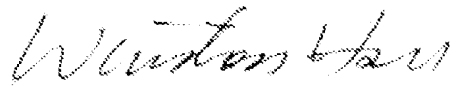
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Conclusion:

Therefore, all pending claims are submitted to be in condition of allowance. Applicant respectfully requests that a timely notice of allowance be issued in this case.

10   The Examiner is encouraged to telephone the undersigned if there are informalities that can be resolved in a phone conversation, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

Sincerely yours,

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